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EXAMINER

EL CHANTI, HUSSEIN A

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.



***Response to Amendment***

1. This action is responsive to amendment received on May 1, 2006. Claims 6, 10, 13-14 and 22-25 were amended. Claims 2-25 are pending examination.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Downs et al., U.S. Patent No. 6,112,243 (referred to hereafter as Downs).

As to claim 22, Downs teaches a communications service platform comprising:

a multiplicity of subsystems, each of the subsystems including:

respective service processing resources and a respective resource locator (see col. 3 lines 10-28, plurality of resource allocators are connected to resource providers);  
and

wherein collectively said subsystems provide a distributed processing architecture which distributes the task of resource management and resource allocation between said multiplicity of subsystems (see col. 3 lines 10-28); and

wherein each subsystem resource locator includes:

means for communicating to each of said other subsystem resource locators data indicating the subsystem identity and data indicating the availability of resources in the respective subsystem (see col. 6 lines 25-37, the resource allocator maintains a list of the resources available to the subsystem);

means for receiving identity data and resource availability data from other subsystem resource locators (see col. 6 lines 25-65); and

means to subsequently broadcast request for resources from each of said other subsystem resource locators by communicating signaling messages directly with each of said other subsystem resource locators (see col. 5 lines 40-65 and abstract lines 15-19, the requester communicates directly with the resource provider).

As to claim 2, Downs teaches a platform according to claim 22, in which the resource locators are arranged to communicate directly with each other by peer-to-peer signaling (see col. 5 lines 35-62).

As to claim 3, Downs teaches a platform according to claim 22, further comprising a resource broker and in which at least some communication between the resource Locators is mediated by the resource broker (see col. 5 lines 28-62).

As to claim 4, Downs teaches a platform according to claim 3, in which the resource broker is located in one of the said subsystems (see col. 5 lines 28-62).

As to claim 5, Downs teaches a platform according to claim 3, in which the resource broker includes:

a data interface arranged to receive capability data and interface data from respective resource locators, and

a registry arranged to store the said capability data and interface data (see col. 6 lines 25-65).

As to claim 6, Downs teaches a platform according to any one of claims 3, in which a resource locator in a subsystem is arranged initially to read capability data and interface data for another subsystem from the resource broker, and subsequently communicates further data directly with the other subsystem using the interface of the subsystem identified in the said interface data without further reference to said resource broker (see col. 5 lines 25-col. 6 lines 65).

As to claim 7, Downs teaches a platform according to any one of claims 3, in which at least one of the subsystems is arranged to communicate directly with a selected other subsystem via a respective specific data interface and in which others of the subsystems are arranged to communicate with a selected other subsystem via an object bus (see col. 3 lines 27-51).

As to claim 8, Downs teaches a platform according to claim 7 in which the or each said subsystem arranged to communicate directly via a respective specific data interface is arranged, on initialization of the said subsystem, to read data for the selected other subsystem from the resource broker, and in response to calls subsequent to the initialization of the subsystem, communicates directly with the selected other subsystem without reference to the resource broker (see col. 5 lines 25-col. 6 lines 65).

As to claim 9, Downs teaches a platform according to claim 7, in which the said subsystems arranged to communicate via an object bus are arranged, in response to each new call, to read resource data from the resource broker (see col. 5 lines 28-62).

As to claim 10, a communications system comprising:

a plurality of call processing subsystems;

a network interconnecting the plurality of call processing subsystems;

a resource broker connected to the network, the resource broker including a data interface arranged to receive capability data and interface data from respective call processing subsystems (see col. 5 lines 25-col. 6 lines 65), and

a registry arranged to store the said capability data and interface data (see col. 5 lines 25-col. 6 lines 65);

wherein the resource locator of one of the plurality of call processing subsystems initially reads the capability data and interface data for another one of the plurality of call processing subsystems stored in the registry of the resource broker, and subsequently communicates signaling messages directly with the another one of the plurality of call processing subsystems without further reference to the resource broker (see col. 5 lines 25-col. 6 lines 65).

As to claim 11, Downs teaches a communications system according to claim 10, further comprising an object bus interconnecting at least some of the call processing subsystems (see col. 5 lines 35-62).

As to claim 12, Downs teaches a communications system according to claim 11, in which communication paths between others of the subsystems bypass the object bus (see col. 5 lines 28-59).

As to claim 13, Downs teaches a computing platform comprising a multiplicity of loosely coupled computing subsystems, each of the said subsystems including respective data processing resources and a respective resource Locator arranged to advertise the identity of the respective resource locator and the loading of the respective resources by directly broadcasting to others of the resource locators and to directly receive resource signaling from others of the resource Locators that has been broadcasted by others of the resource locators (see col. 6 lines 16-67).

As to claim 14, Downs teaches a method of operating a communications system, the system including a multiplicity processing subsystems and network interconnecting the multiplicity of subsystems, the method comprising;

a) broadcasting from resource locator in a respective one of the multiplicity of subsystems to resource Locators in others of the multiplicity of subsystems data indicating the identity of the said one subsystem and the availability of resources in the said one subsystem (see col. 3 lines 8-65);

b) repeating step (a) for each other of the multiplicity of subsystems:

c) when one of the multiplicity of subsystems, in the course of processing a call, requires resources not present Locally in the said subsystem:

identifying from the said data communicated to the resource locator of the said one subsystem another subsystem having the said resources;

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ii) accessing the said subsystem via the network;

wherein the resource locators are arranged to communicate signaling directly with each other (see col. 5 lines 25-col. 6 lines 65).

As to claim 15, Downs teaches a method according to claim 14, in which, for each of the multiplicity of subsystems, step (a) is repeated regularly (see col. 5 lines 27-col. 6 lines 16).

As to claim 16, Downs teaches a method according to claim 15, in which the period of repetition for step (a) is small compared to the mean duration of a call processed by the communications system (see col. 3 lines 14-col. 4 lines 57).

As to claim 17, Downs teaches a method according to claim 14, in which, for at least one of the multiplicity of subsystems, step (a) is repeated in response to an event in the respective subsystem (see col. 5 lines 15-67).

As to claim 18, Downs teaches a method according to claim 17, in which the said event is a change in resource availability in the subsystem exceeding a predetermined threshold (see col. 5 lines 25-col. 6 lines 65).

As to claim 19, Downs teaches a method according to any one of the preceding claims in which the communication of resource data between subsystems is mediated by a resource broker (see col. 5 lines 25-col. 6 lines 65).

As to claim 20, Downs teaches a method according to claim 19, in which data is communicated between at least some of the subsystems and the resource broker via an object bus (see col. 3 lines 25-65).



As to claim 21, Downs teaches a method according to claim 20 in which data is communicated between others of the subsystems directly, bypassing the object bus (see col. 5 lines 15-col. 6 lines 15).

As to claim 23, Downs teaches a multiplicity of subsystems, each of the subsystems including:

respective service processing resources and a respective resource locator (see col. 2 lines 56-col. 3 lines 20); and

wherein collectively said subsystems provide a distributed processing architecture which distributes the task of resource management and resource allocation between said multiplicity of subsystems (see col. 3 lines 10-65, plurality of agents and resource locators are connected to the network); and

wherein each subsystem resource locator includes:

means for communicating to each of said other subsystem resource locators data indicating the subsystem identity and data indicating the availability of resources in the respective subsystem (see col. 5 lines 25-col. 6 lines 65);

means for receiving identity data and resource availability data from other subsystem resource locators; and

means to register and discover resources and interface details with a resource broker when said one of said multiplicity of subsystems is initialized; and

means to subsequently request resources directly from other subsystem resource locators by communicating signaling directly with said other resource locators

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and without further reference to said subsystem being initialized (see col. 5 lines 25-col. 6 lines 65).

As to claims 24 and 25, Downs teaches the method and platform of claims 19 and 3 respectively, wherein the communication of the resource data mediated by the resource broker occurs at initialization of at least one of the subsystems, and the broadcast for the request for resource from one of the resource locators of a respective one of the subsystems to another one of the subsystem is provided by direct communication between the subsystems, subsequent to the mediated communication, without further reference to the resource broker (see col. 5 lines 25-col. 6 lines 65).

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hussein El-chanti

June 21, 2006

  
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